

Minitrack: 'Electronic-Democracy' (Cluster: e-Government)

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The Internet and other information technologies promise to invigorate democratic processes by facilitating public discourse among citizens and between government and all stakeholders. However, these technologies can also foster anti-democratic outcomes such as limited access, reduced privacy, increased control, and reduced interaction. Moreover, it is unclear whether or how electronic democracy might invigorate democracy more broadly. Electronic voting, access equity, online interaction for public policy decision making, information reliability, political coordination among multiple stakeholders, and public monitoring of and communication with elected officials are a few of many the areas of research. This minitrack presents six research papers that investigate how information and communication technologies contribute to democratic processes and outcomes.

The Role of Digital Signature Cards in Electronic Voting begins a series of three papers on electronic voting. In it, Robert Krimmer identifies and defines three main properties that digital signature cards must incorporate to ensure secure voting: authentication, storage, and secure processing. The paper then demonstrates the application of the three properties through analysis of 2003 test election in Austria that utilized signature cards.

In the second paper, *Security Aspects of Internet Voting*, Guido Schryen shows, through the presentation of different state-of-the-art pilot schemes, that internet voting holds distinct legal and security challenges that must be met through appropriate design of technical solutions. The paper provides a technical structure model and demonstrates cryptographic elements that help meet these requirements.

Research in the third paper broadens the discussion on security for electronic voting. In *The Procedural Aspect of Security in Electronic Voting*, Alexandros Xenakis and Ann Macintosh move away from technical solutions to security toward a process approach that relates e-voting risks to different stages of the e-voting process. Using analysis of data from pilot efforts in the UK, the paper suggests means by which risks can be managed.

The fourth paper, *Characterizing E-Participation in Policy Making*, begins a set of papers on citizens' perspectives about and roles in e-democracy. In it, Ann Macintosh offers a framework for categorizing and describing the various types of citizen participation that are demonstrated in e-democracy pilots. The work clarifies the level of participation, technology used, constraints, and benefits.

Broadband Penetration and Participatory Politics: South Korean Case, the fifth paper by Jae Yun Moon, Shinkyu Yang and Hellen Kim, explores how citizen interaction through the internet can affect the political process in a young democracy. The paper provides a detailed case analysis of the Roh Moo-hyun's election victory in which internet-based coordination among supporters was critical, if not decisive.

In the sixth paper, *Same Bed, Different Dreams?: A Comparative Analysis of Citizen and Bureaucrat Perspectives on E-Government*, Jae Moon and Eric Welch investigate the divergence among citizen and bureaucrat perspectives on e-government in terms of pace of implementation, equitable access, and safety. The paper identifies means by which perceptual gaps can be narrowed.